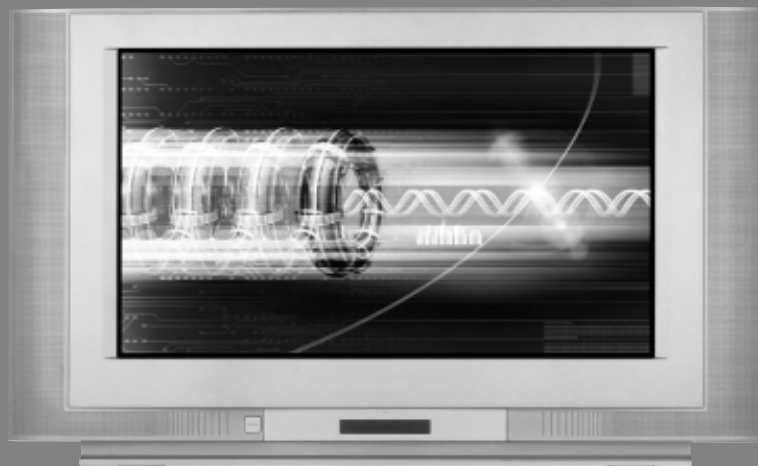












NEC

INSTRUCTION MANUAL COLOUR TELEVISION



PF28WT100

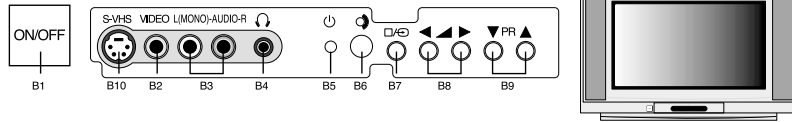
CONTENTS

	REMOTE CONTROL & TV CONNECTIONS	4
	IMPORTANT SAFEGUARDS	5
	INSTALLATION	5
	START UP	6
	CONNECTING EXTERNAL EQUIPMENT	6
	DAILY USE	7
	MENUS DESCRIPTION	10
	TELETEXT	15
	TROUBLESHOOTING	18
	SPECIFICATION.....	19

REMOTE CONTROL & TV CONNECTIONS

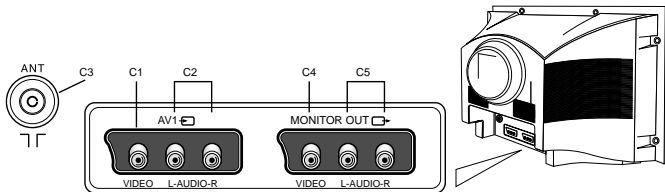
LOCAL CONTROL

Front



- | | |
|--|-------------------------------------|
| B1 MAIN POWER button | B6 REMOTE sensor |
| B2 FRONT VIDEO INPUT socket | B7 TV / AV button |
| B3 FRONT AUDIO INPUT (L + R) socket | B8 VOLUME UP/DOWN buttons |
| B4 HEADPHONE socket | B9 PROGRAM UP/DOWN buttons |
| B5 STAND-BY indicator | B10 FRONT PANEL S-VIDEO jack |

Rear

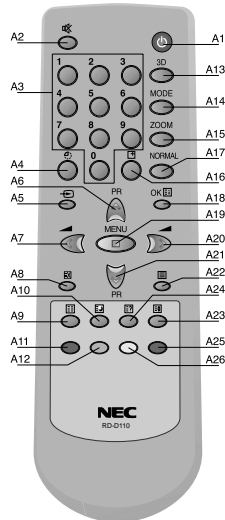


- | |
|--|
| C1 REAR VIDEO INPUT Socket |
| C2 REAR AUDIO INPUT(L+R) Socket |
| C3 AERIAL jack |
| C4 REAR MONITOR OUTPUT Socket |
| C5 REAR AUDIO OUTPUT (L+R) Socket |

REMOTE CONTROL UNIT

TV mode

- | | |
|------------|----------------------------|
| A1 | POWER |
| A2 | SOUND MUTE |
| A3 | NUMBER 0..9 |
| A4 | SLEEP |
| A5 | TV / AV |
| A6 | PROGRAM UP (CURSOR UP) |
| A7 | VOLUME DOWN (CURSOR LEFT) |
| A8 | . |
| A9 | . |
| A10 | . |
| A11 | SKIP |
| A12 | MOVE |
| A13 | 3D(SOUND EFFECT) |
| A14 | MODE |
| A15 | ZOOM |
| A16 | RECALL |
| A17 | NORMAL |
| A18 | OK/PRESET |
| A19 | MENU |
| A20 | VOLUME UP (CURSOR RIGHT) |
| A21 | PROGRAM DOWN (CURSOR DOWN) |
| A22 | TV > TELETEXT |
| A23 | . |
| A24 | . |
| A25 | . |
| A26 | DELETE / FREEZE |



TELETEXT mode

- | | |
|------------|------------------------------------|
| A1 | POWER |
| A2 | SOUND MUTE |
| A3 | NUMBER 0..9 |
| A4 | . |
| A5 | . |
| A6 | PAGE UP |
| A7 | VOL/BRIGHT/CONTRAST DOWN |
| A8 | CANCEL |
| A9 | PAGE HOLD |
| A10 | SUBPAGE |
| A11 | RED |
| A12 | GREEN |
| A13 | . |
| A14 | . |
| A15 | . |
| A16 | . |
| A17 | . |
| A18 | INDEX |
| A19 | VOL/BRIGHT/CONTRAST MENU SELECTION |
| A20 | VOL/BRIGHT/CONTRAST UP |
| A21 | PAGE DOWN |
| A22 | TELETEXT > TV |
| A23 | HEIGHT |
| A24 | REVEAL |
| A25 | CYAN |
| A26 | YELLOW |

IMPORTANT SAFEGUARDS

WATER AND MOISTURE

The apparatus shall not be exposed to dripping or splashing water and no object filled with liquids, such as vases, should be placed on the apparatus.

HEAT

Never place the set near heat sources.
Never put a naked flame, such as a candle, on the top of TV set.

VENTILATION

Do not cover the ventilation openings in the cabinet and never place the set in a confined space such as in a bookcase or built-in cabinet unless proper ventilation is provided. Leave a minimum 10 cm gap all around the unit.

OBJECT ENTRY

Do not insert foreign objects, such as needles and coins, in the ventilation openings.

LIGHTNING STRIKE

You should disconnect the set from the mains and the aerial system during thunderstorms.

CLEANING

Unplug the set from the mains while cleaning.

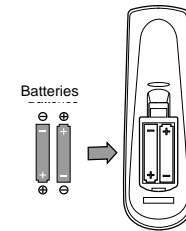
AFTER MOVING THE SET

If the set is moved or turned, the MAIN POWER button must be switched off for at least 15 minutes in order to take out colour patches on the screen.

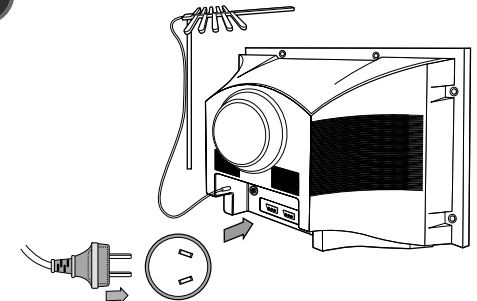
The appliance is not intended for use by young children or infirm persons without supervision.

Young children should be supervised to ensure that they do not play with the appliance.

INSTALLATION



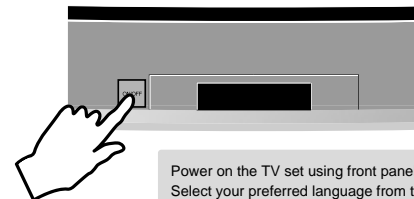
Open remote control battery compartment (at the rear) and insert two 1.5V type AAA batteries. Warning: be careful to respect battery polarities.



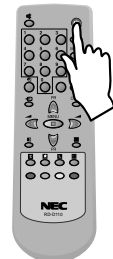
Insert the main plug into a 240V 50Hz AC power socket.

Connect aerial to aerial jack (C3).

SWITCHING ON AND OFF



Power on the TV set using front panel MAIN POWER button (B1).
Select your preferred language from the LANGUAGE menu (see section START UP on page 6).
Press the remote control MENU button (A19) to enter the main menu.
Select Install menu to tune and memorise TV programs.





START UP

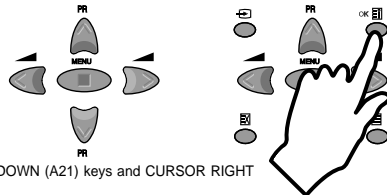
LANGUAGE MENU

The very first time that you turn on the TV, the LANGUAGE menu will appear on the screen. Its purpose is to enable you to select the language that will be used for all the OSD (On Screen Display) menus. The user must enter a choice of language before proceeding further.

The language entered at this stage can still be modified at any later time, by entering the LANGUAGE menu (accessed from the FEATURES menu; see later section under MENU DESCRIPTION).

The descriptions used in the menu are those of the country code (e.g. AUS= Australia, NL = Holland etc).

LANGUAGE									
BG	CZ	D	DK	E					
F	FIN	AUS	GR	H					
I	N	NL	PL	RO					
RUS	S								



Selection is made by use of the remote control CURSOR UP (A6) / CURSOR DOWN (A21) keys and CURSOR RIGHT (A20) / LEFT (A7) keys.

Once you are satisfied with your selection, push the OK button (A18) to confirm your choice. The choice will briefly highlight in red, after which the menu will disappear.

Note : The languages shown are subject to modification without prior notice.

AUTOMATIC TUNING

Automatic Tuning System

ATSS = Automatic Tuning and Sorting System. To start the ATSS function:

- Select "ATSS" function.
- Adjust to the required country.
- Press and hold the OK button (A18) to start the automatic tuning.

The ATSS function has started when the phrase "Please Wait !" appears (in red characters) in the help instructions box, below the Install menu. When the ATSS function is finished, the stored programs are displayed on screen using Edit menu presentation (to Exit tuning before automatic tuning is finished, press the remote control MENU button (A19)).



CONNECTING EXTERNAL EQUIPMENT

The rear RCA(C1)(C2), RCA(C4)(C5) sockets, the front AV socket (B2) (B3), and the S-VHS socket (B10) are three dedicated sockets to connect audio-video equipment.

If you push the button PR UP/DOWN, you can change from mode AV1(or AV2) to mode TV.

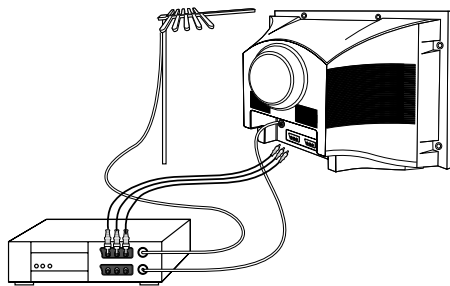
Rear

REAR VIDEO & AUDIO SOCKET (AV1)

This socket (C1)(C2) has video / audio inputs . Use the TV/AV buttons (A5) or (B7) to select AV1.

REAR MONITOR OUT SOCKET

This socket (C4)(C5) has video / audio outputs.



Front

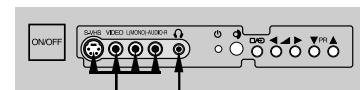


TV/AV SELECTION

Allows to switch between TV and external modes.

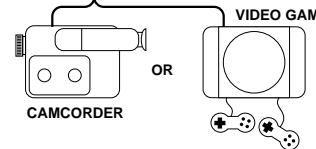
By repeatedly pressing the remote control TV / AV (A5) or the TV front panel TV / AV (B7) button, the on-screen display is changed as shown :

AV1 > AV2 > SVHS > TV



FRONT AV SOCKET (AV2)

The front AV socket (B2) - (B3) has audio and video inputs. To switch from TV to these inputs, use the TV / AV buttons (A5) or (B7) and select AV2.



HEADPHONE SOCKET

To hear TV sound with headphones, insert a 3.5mm headphone plug into the headphone socket (B4). The speaker's sound will be automatically cut off.



FRONT S-VIDEO JACK (Option for real flat TVs)

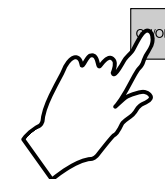
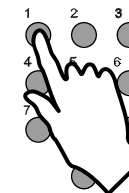
The front S-VIDEO jack (B10) has video inputs only. It is necessary to connect the audio inputs to socket (B3) in order to have audio and video. To switch from TV to these inputs, use the TV / AV buttons (A5) or (B7) and select SVHS.



DAILY USE

SWITCHING ON TV SET

- 1) If stand-by indicator (B5) is lit, then the TV set is in stand-by mode. You can switch on using the remote control POWER button (A1), the NUMBER 0...9 buttons (A3), or PROGRAM UP (A6) / DOWN (A21) buttons. The front panel PROGRAM UP/DOWN buttons (B9) can also be used. Once on, the stand-by indicator turns to green and the picture appears on the screen.
- 2) If stand-by indicator (B5) is not lit, then the TV set is powered off. You must press the TV set front panel MAIN POWER button (B1). If a picture does not appear, then the stand-by indicator will be lighted red. In this case, use the remote control as indicated in 1).
- 3) If stand-by indicator (B5) is flashing red, and green then the TV set is in child-lock mode. It is necessary to use the remote control POWER button (A1), NUMBER 0...9 buttons (A3), or PROGRAM UP (A6) / DOWN (A21) buttons. The front panel PROGRAM UP/DOWN buttons (B9) will not function. Once on, the stand-by indicator turns to green and the picture appears on the screen.



SWITCHING OFF TV SET

- 1) Pressing the remote control POWER button (A1), you can switch off to stand-by mode (low power consumption mode) which also allows quick restart by remote control (see above: SWITCHING ON TV SET).
- 2) Pressing the TV set front panel MAIN POWER button (B1), you can completely power off the TV set. In this case, you must use the same front panel POWER button (B1) to switch on again (see above: SWITCHING ON TV SET).

Remark: If a broadcast signal is not present after 30 minutes, the TV set will be automatically turned to stand-by mode.

PROGRAM SELECTION (FROM 0 TO 99)

Direct selection

Use the remote control NUMBER 0...9 buttons (A3).
For two digits program numbers, enter the second digit within 2 seconds.

Up / Down selection

Use the remote control PROGRAM UP (A6) / DOWN (A21) buttons or the TV set front panel PROGRAM UP / DOWN buttons (B9).

SOUND CONTROL

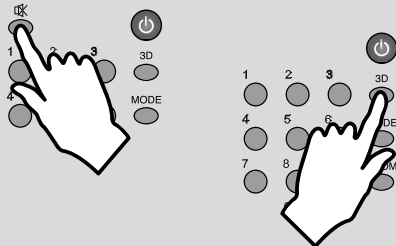
Volume adjustment

Use the remote control VOLUME UP (A20) / DOWN (A7) buttons or the TV set front panel VOLUME UP / DOWN buttons (B8).



Mute

Mute the sound by pressing the remote control SOUND MUTE button (A2).
Then, logo is displayed. The previous sound setting is returned after pressing the same button a second time.
If a sound related function is used (e.g. VOLUME, 3D) then the MUTE will also be cancelled.

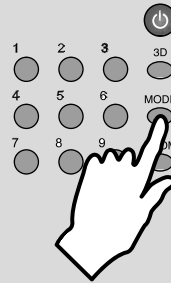


Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Mono forcing, dual language

- If you are unable to get good sound quality for a program due to poor reception, you can force a change from stereo to mono transmission by pressing the remote control MODE button (A14). Then the program status display will indicate "MONO" with a icon.

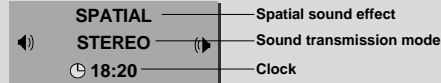
- On the other hand, during a program with dual language transmission, the MODE button (A14) allows you to toggle between the first and second language. The program status display will indicate "DUAL 1" or "DUAL 2" (plus NICAM according to the received signal).
- To return to initial state, press again the MODE button (A14).



Sound effects

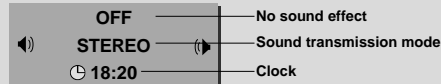
A SPATIAL sound effect is available, using the remote control 3D (A13) button.

The following display appears:



To return to initial sound effect, press again the 3D (A13) button.

The following display appears:



As an option, the sound effects PANORAMA and Dolby Virtual are available with the same button. For other adjustments such as BALANCE, EQUALIZER or AVL(option), use the SOUND menu (page11).

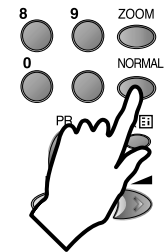
PICTURE CONTROL

You can select three pictures settings, by using the remote control NORMAL button (A17) :

- Normal I (standard hard picture)
- Normal II (standard soft picture)
- Favourite

For other adjustments: BRIGHTNESS, CONTRAST, COLOUR, SHARPNESS, NOISE REDUCTION, use the PICTURE menu.

If an NTSC signal is received, then the TINT adjustment will also be available.

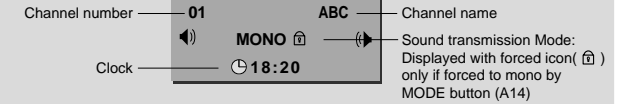


FREEZE picture

This TV scans at 100Hz. It has an additional FREEZE picture function that holds the current image on the screen (similar in effect to the "pause" function of a video player). To freeze the image at any time, just press on the yellow FREEZE button (A26). This function is available with any signal source (from aerial, video player, DVD).

The display will indicate that the FREEZE function is activated. A second press on the same button (A26), entry to the MAIN menu (A19), or change of program will cancel the FREEZE function.

PROGRAM STATUS DISPLAY (Recall)

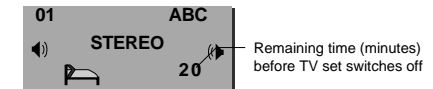


Use the remote control RECALL button (A16) to display (for 4 seconds only) program status information. This display appears also after a program selection or after switching on the TV set.

SLEEP FUNCTION

The set will turn off (to stand-by mode) after a period of time that you can select. By repeated use of the remote control SLEEP button (A4), you can enter one of the following settings :

OFF > 20 min > 40 min > 60 min > 80 min > 100 min > 120 min > OFF



The SLEEP time remaining (before TV turn-off) can be seen again at any time by one touch on the remote control SLEEP button (A4).

A second touch (while the status display is active) will modify the SLEEP time remaining.

FORMAT SELECTION

AUTO setting :

If picture format signalling data is received, then the most appropriate ZOOM format will be automatically selected. In the absence of this data, the default ZOOM format will be selected (see page 13, ZOOM AUTO function under FEATURES MENU).

Otherwise, the preferred mode of the user can be forced by repeated pressing of the remote control ZOOM button (A15):

The following picture formats are available:
AUTO > 4:3 > 14:9 > ZOOM 14:9 > ZOOM 16:9 > FULL SCREEN > PANORAMA > FAVOURITE > AUTO.

FAVOURITE Format

This contains the users preferred format setting. In order to enter new settings, proceed as follows:

- Navigate the list of available formats with the ZOOM button (A15) until FAVOURITE is selected.
 - While the selection FAVOURITE is active on the screen, the format can be manipulated by use of the CURSOR LEFT (A7), RIGHT (A20) buttons (to change the horizontal size) and the CURSOR UP (A6) or DOWN (A21) buttons (to change the vertical size).
 - The controls CURSOR RIGHT (A20) and CURSOR UP (A6) increase the size.
 - The controls CURSOR LEFT (A20) and CURSOR DOWN (A6) decrease the size.
 - The new settings are automatically memorized in the FAVOURITE format.
- If the OSD status display FAVOURITE is at any time lost (timeout is 3-4 seconds after any previous use of the CURSOR keys), then a single touch of the ZOOM button (A15) is necessary before adjustment can be resumed.

MENUS LANGUAGE SELECTION, CHILD LOCK, CLOCK SETTING, WAKE UP, NOISE REDUCTION

These functions are available in the Features menu (see description page 14).

CHILD LOCK

This function only allows the TV to be turned on using the remote control. Once the user has set this CHILD LOCK to ON or OFF, it will remain in this condition until the user changes it again.

WAKE UP

It is necessary to have set the clock (either manually or automatically) in order to be able to use this function. If the clock is not set (---: is shown) then the WAKE TIME and WAKE PROG. will not be selectable.

The default setting for WAKE TIME is in the "OFF" position. After each use (the TV turns on according to the previous setting) the WAKE TIME will be returned to the "OFF" position, conserving always the last time setting entered ready for re-use. This function also operate, when "CHILD LOCK ON" is selected.

standby mode.

Alternatively, the user can enter the time manually using the CLOCK function. However, if this is done the clock will not be periodically updated as would happen if the time is set automatically. We recommend that the user choose (if available) a CLOCK PROG which allows the time to be updated automatically.

DEFAULT ZOOM CONTROL

If the ZOOM control is set to AUTO (A15, see page 9, FORMAT SELECTION), then the picture format presented is controlled by the received picture format signalling data embedded in the transmission. In the absence of this signalling data (as can often be the case) a default format must be used. This default format can be selected by the ZOOM AUTO function.

LANGUAGE

This can be changed at any time by the user in the LANGUAGE menu (accessed via the FEATURES menu).

CLOCK SETTING

The TV will automatically attempt to set the clock when powered on (with the MAIN POWER button). It takes as reference information embedded in the teletext signal of the channel defined by CLOCK PROG. Therefore, automatic clock setting is only possible if teletext is available on this channel.

If no time is captured automatically (the clock will show - : -), then the TV will try again to set the clock whenever turning on from

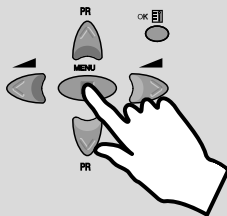
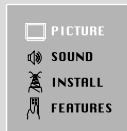


MENUS DESCRIPTION

MAIN MENU

All menus are removed within 25 seconds if you don't press any button.

Press the remote control MENU button (A19) to display the main menu. Then, you have the choice between several sub-menus:



If you want to Exit the main menu, press the MENU button (A19) a second time.

- To select one of the sub-menu, use the remote control CURSOR UP (A6), DOWN (A21) buttons.
- To enter the selected sub-menu, press the remote control OK button (A18).

Remark: In AV mode the INSTALL menu is not available, and will not be selectable.

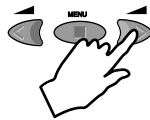
HOW TO USE THE SUB-MENUS

The sub-menus referred to here are: PICTURE, SOUND, INSTALL, FEATURES.

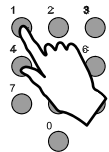
- Adjust the function using :



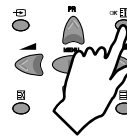
- Select the desired Position by using the remote control CURSOR UP (A6) or DOWN (A21) buttons.



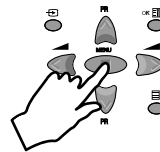
- The remote control CURSOR LEFT (A7) or RIGHT (A20) buttons if you want to modify the function value



- The remote control NUMBER 0...9 buttons (A3) to enter directly new data.



- Store (if needed) by pressing the remote control OK button (A18).



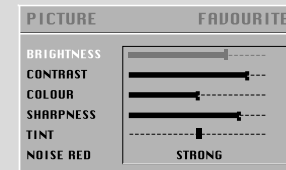
- Then Exit to main menu by pressing the MENU button (A19).

PICTURE MENU

(For operating instructions, see page 10, HOW TO USE THE SUB-MENUS)

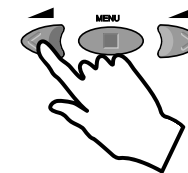
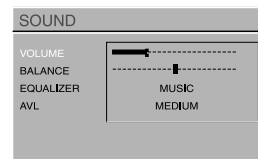
- Select and adjust the level of each function : BRIGHTNESS, CONTRAST, COLOUR, SHARPNESS, TINT (if available).
- The above modified values are automatically stored in FAVOURITE mode.
- NOISE REDUCTION feature has 4 levels according to your preference.
- The OK (A18) or NORMAL button will select the picture presets FAVOURITE, NORMAL I, NORMAL II. The currently selected preset is displayed in the menu header.
- The FAVOURITE preset contains the settings that you last entered.

If the NTSC standard is detected (eg from VHS player connected to AV1), then TINT will be available. Otherwise TINT will be displayed, but not selectable.



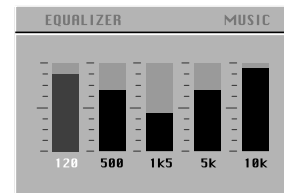
SOUND MENU

(For operating instructions, see page 10, HOW TO USE THE SUB-MENUS)



- Select VOLUME function to adjust the volume level.
- Select BALANCE function to adjust sound balance between the left and right speakers. If the indicator is highlighted in red, then the central balance position has been found.
- Use the EQUALIZER function to select the sound presets MUSIC, SPEECH, NORMAL, FAVOURITE by use of the CURSOR LEFT (A7), RIGHT (A20) buttons. The FAVOURITE preset contains the settings that you last entered into the EQUALIZER menu.
- The OK button (A18) will enter the EQUALIZER menu, and allow you to change the FAVOURITE settings.
- Automatic Volume Level (AVL, Option) feature has 4 levels according to your preference. This feature corrects for large volume level changes, such as occur when passing from a movie to advertisements. The AVL solves this problem by equalizing the volume level, over a SHORT MEDIUM or LONG period (referring to the time constant over which the equalizing effect lasts).

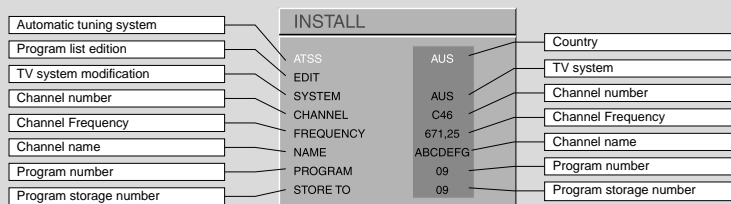
EQUALIZER MENU



- Select the equalizer band by use of the CURSOR LEFT (A7) or RIGHT (A20) buttons.
- Adjust the level of each of the 5 equalizer bands, 120Hz, 500Hz, 1500Hz, 5000Hz, 10000Hz, by use of the CURSOR UP (A6) and DOWN (A21) buttons.
- The above modified values are automatically stored in FAVOURITE mode.
- The OK button (A18) will select the picture presets MUSIC, SPEECH, NORMAL, FAVOURITE. The currently selected preset is displayed in the menu header.
- The FAVOURITE preset always contains the settings that you last entered.

INSTALL MENU

(For operating instructions, see page 9, HOW TO USE THE SUB-MENUS)



Automatic Tuning System

ATSS = Automatic Tuning and Sorting System. To start the ATSS function:

- Select "ATSS" function.
- Adjust to the required country.
- Press and hold the OK button (A18) to start the automatic tuning.

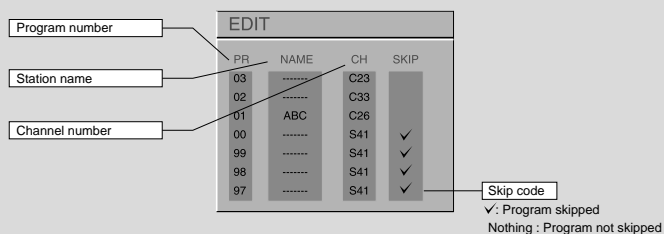
The ATSS function has started when the phrase "Please Wait!" appears (in red characters) in the help instructions box, below the Install menu.

When the ATSS function is finished, the stored programs are displayed on screen using Edit menu presentation (to Exit tuning before automatic tuning finished, press the remote control MENU button (A19))

Warning: This television has been factory pretuned to channels 2, 7, 9, 10 and 28. If the auto search function is activated, these preset channels will be deleted and new channels tuned to 1, 2, 3 ETC..

Program List Edition

This allows you to easily manipulate the existing program order allocation, by using Edit menu functions described below.



To enter the EDIT menu: From Install menu, select "Edit", and press the OK button (A18): the EDIT menu appears.

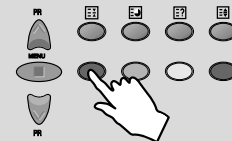
The current program being displayed is highlighted in blue (on the central line). In the above case, the current program is PR00. The 3 previous, and 3 following programs, are always displayed. Any program from 00 to 99 can be selected, by using the remote control CURSOR UP (A6) / DOWN (A21) buttons.

The memorised programs can be modified as follows :



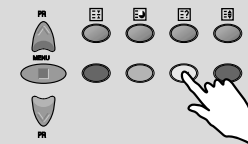
Channel skipping

- You can select skip "YES" or "NO" using the remote control RED "Skip" button (A11). A program with skip "YES" doesn't appear on screen when changing channels with the PROGRAM UP (A6) / DOWN (A21) buttons.



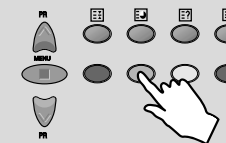
Channel deleting

- Select the program to delete using the remote control CURSOR UP (A6) / DOWN (A21) buttons.
 - Press the remote control YELLOW "Delete" button (A26). The deleted program is moved to program number 99 with skip changed to "YES". The existing 99 program is moved to program number 98 and so on.



Channel order changing

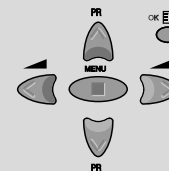
- Select the program to move using the remote control CURSOR UP (A6) / DOWN (A21) buttons.
 - Press the remote control GREEN "Move" button (A12): the program line background is highlighted in orange, and can be moved to another position using the remote control CURSOR UP (A6) / DOWN (A21) buttons.
 - When the desired position is reached, confirm the new position pressing the remote control GREEN "Confirm" button (A12). Then the program line background will return again to gray.



Manual Channel Tuning

Choose a starting point

- Select with "Program" the program from which you want to start manual tuning. Then the channel number, the frequency, the name and the program number of this program are displayed in the Install menu.



Channel searching

- Select the "Frequency" function.
 - Press, and hold for more than 1 second, the remote control CURSOR RIGHT (A20) [LEFT (A7)] buttons to start up [down] manual tuning.
 - Searching will stop automatically at the next channel found (to stop tuning, press the remote control MENU button (A19)).

Note: You can directly locate a program by entering the data into the "channel" or the "frequency" function.

Enter station name

It is possible to enter your own choice of name for each program. You can change an existing name, or enter a name where none exists. If none exists "....." will be shown in the Install menu, and program status display (see the section PROGRAM STATUS DISPLAY on page 8).
 - Select the "NAME" function.
 - Select one of the 7 character positions by using the remote control CURSOR RIGHT (A20) / LEFT (A7) buttons to move the cursor.
 - Then use the CURSOR UP (A6) /DOWN (A21) buttons to select the desired character for that position.
 - Repeat the last two instructions for other positions, as desired.
 - Once the name has been entered, press the OK button (A18) to store it. The name will be memorised to the program number currently shown on the "Store To" line. The "Store To" program number will highlight in red briefly.

Perform fine tuning

- If you are unable to get a good picture or reasonable quality sound due to poor reception, it is possible to perform fine tuning.
 - Select the "frequency" function.
 - Press, for less than 1 second, the remote control CURSOR RIGHT(A20) [LEFT(A7)] buttons to perform up [down] fine tuning in steps of 0.05MHz (50 kHz).

Store program in memory

- Select the "store to" function
 - Enter the program number you want to store to either by using the remote control CURSOR RIGHT (A20) / LEFT (A7) buttons, or directly by using the remote control NUMBER 0...9 buttons (A3).
 - Press the OK button (A18) to confirm.
 Remarks: this function can also be used if you want to copy a program already memorised to another program number.

FEATURES MENU

See section near the end of section DAILY USE for a more detailed explanation of these functions.

(For operating instructions see page 10, HOW TO USE THE SUB-MENUS)

FEATURES	
CHILD LOCK	OFF
WAKE TIME	OFF
WAKE PROG	04
CLOCK	--:--
CLOCK PROG	00
ZOOM AUTO	ZOOM 16:9
LANGUAGE	AUS

1. When switched to ON:
Prevents the use of the TV set without remote control

2. Wake up function
This function is only selectable when the clock is set. The TV set turns on from stand-by at the WAKE TIME with the programme entered on the WAKE PROG. line. Put the TV set on stand-by with the remote control

3. Shared with WAKE TIME.

4. TV clock setting
This function allows user to enter the time manually. Note : If you turn off the set with the main power button, the clock setting is lost. An automatic attempt is made to set the clock again at power on.

5. This function is only selectable, when the ZOOM button (A15) at the remote is selecting AUTO.

6. LANGUAGE menu entry.

1. Adjust this value ON or OFF.
- In stand-by mode, the stand-by indicator flashes red and green to indicate the CHILD LOCK is set.
- The front panel TV buttons (B7, B8, B9) become inactive and the TV will only respond to the remote control.

2. - Switch the WAKE UP function OFF or 'ON' (the time will be shown e.g. 07:15) with the remote control CURSOR LEFT (A7) /RIGHT (A20) buttons
- Enter the wake up time with the remote control 0...9 NUMBER (A3) buttons

3. Adjust TV turn-on program number

4. Adjust TV clock. Clock will start at 0 seconds upon entry of the 4th figure.
The prog. no. which can be used to automatically seize the time at turn on can be entered here.

5. The selection of this format, will be used as the default of the TV, when it starts to "ON" condition.

6. The currently selected LANGUAGE is displayed.
Press the OK button (A18) to access the menu and change the selection.

LANGUAGE MENU

- Select the preferred LANGUAGE by use of the CURSOR LEFT (A7), RIGHT (A20) buttons, and the CURSOR UP (A6) or DOWN (A21) buttons.
- Press the OK button (A18) to confirm the selection (the choice will be highlighted in red).

Note : The languages shown are subject to modification without prior notice.

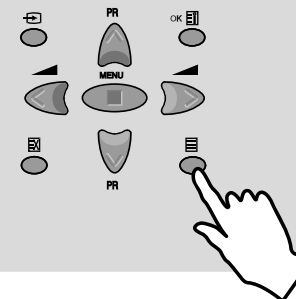
LANGUAGE				
BG	CZ	D	DK	E
F	FIN	AUS	GR	H
I	N	NL	PL	RO
RUS	S			



TELETEXT

ENTERING/LEAVING TELETEXT MODE

- Select the desired program with teletext.
- Press the remote control TELETEXT (☰) button (A22) to select teletext mode. The initial page (or the last page viewed if you have already used teletext in the present channel) appears.
- Picture And Teletext (PAT) function : If you want to watch the TV program and use teletext at the same time, press the TELETEXT button (A22) again. Teletext will be displayed on the left hand part of the screen, and the whole TV picture will be compressed into right hand part of the screen.
- To return to TV mode, press again the TELETEXT (☰) button (A22).




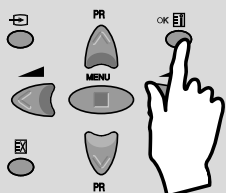
PAGE SELECTION


- You can directly enter the 3 figure page number by using the remote control NUMBER 0...9 buttons (A3).
- You can sequentially select teletext pages by pressing the remote control PAGE UP (A6) / DOWN (A21) buttons.
- At the base of the screen a menu of coloured page links is available, showing either page numbers or a title with headings (eg Sport, News) in RED, GREEN, YELLOW or CYAN colour. These pages can be accessed by using the corresponding coloured buttons (A11, A12, A26, A25) on the remote control.

Once a request is made, the page number is shown in the extreme top left corner of the screen. If the requested page is not immediately available the rolling header will be active until the page arrives.

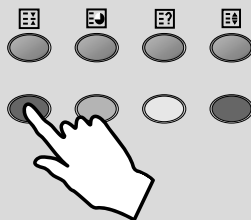
USEFUL TELETEXT FUNCTIONS

INDEX  button (A18): Allows you to return directly to the initial teletext page.



PAGE HOLD  button (A9): Any teletext page or subpage can be held on the screen by pressing the PAGE HOLD button.

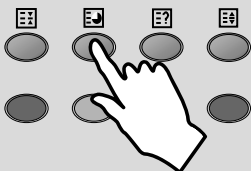
- The page number shown in the extreme top left corner of the screen will become red.
- Press the HOLD button again to cancel hold mode (the page number will return to white).




SUBPAGE  button (A10): Allows you to request a specific subpage:

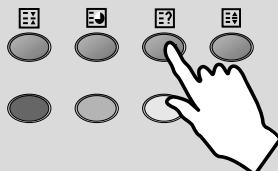
- Press the SUBPAGE button (A10). At the base of the screen a SUBPAGE menu will appear. This has a red subpage minus link, a green subpage plus link, plus a white background showing (e.g. for page 110), 110 / 0001. This is ready to accept the subpage number.
- Enter directly the subpage number you want with the remote control NUMBER 0...9 buttons (A3): for example to request the 2nd subpage, type 0002.
- Alternatively, use the red subpage minus link or the green subpage plus link.
- The subpage number entered is shown at the base of the screen.
- If the requested page is not immediately available the rolling header will be active until the page arrives. Warning: If the subpage is not available (does not exist), then the header will roll continuously and no new page will be found.
- To exit subpage mode, press the SUBPAGE button (A10) again.

Note : Teletext specification allows for subpage numbers 0000 to 3979 (the first figure is limited to the range 0..3, and the third figure 0..7).




REVEAL  button (A24): Press this button to reveal, on certain pages, hidden information such as the answer to a quiz.

- Press the button again to hide the information.



TELETEXT FORMAT PICTURE & SOUND CONTROL

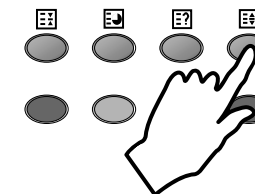
Doubling character height

Repeatedly pressing the HEIGHT button  (A23) doubles the character height in the following order:

Upper half of the page (UP) > Lower half of the page (DOWN) > Return to normal height.

If the page is in UP or DOWN mode, then normal size is automatically set if :

- A new page request is made (e.g. CYAN, INDEX or PAGE UP/DOWN).
- CANCEL mode (A8) function is used.
- VOLUME menu is activated with the MENU button (A19).

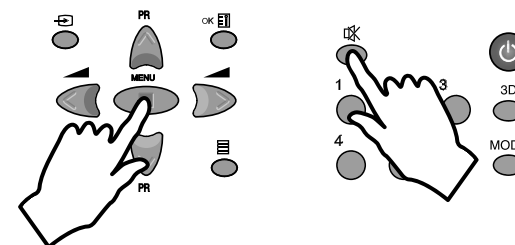


Note : The menu at the base of the screen is always visible

Volume and brightness control in teletext mode




VOLUME (and sound MUTE), BRIGHTNESS and CONTRAST controls are dedicated to the teletext display.

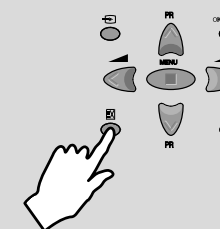
- Access the VOLUME control by pressing the MENU button (A19) in teletext mode. A bargraph will appear in the lower part of the screen (as in TV mode). If MUTE is active a mute icon is also shown.
- A second press on the MENU button (A19) will access the BRIGHTNESS control, and a third press the CONTRAST control.
- The active bargraph will timeout after 3-4 seconds (as in TV mode VOLUME control) or by pressing on the MENU button (A19) a fourth time (after CONTRAST control)
- Each control can be adjusted by using the remote control CURSOR RIGHT (A20) / LEFT (A7) buttons.
- Mute can always be activated by pressing the SOUND MUTE button (A2).
- Any change to the VOLUME level will cancel the SOUND MUTE.



WATCHING TV WHILE PAGE SEARCHING

The CANCEL function can be used to make the teletext page transparent, thus revealing the TV picture:

- To enter cancel mode, press the CANCEL  button (A8) while in teletext mode. The TV program will reappear on the screen, while only the teletext page number remains at the top and left corner of the screen.
- You can enter a new page number in this mode only by using the remote control NUMBER 0...9 buttons (A3), or with the INDEX  button (A18).
- If a page has been requested, but has not yet arrived, "???" flashing characters will be displayed until the page arrives. Otherwise, the same characters will be displayed without flashing until the next arrival of the page in the transmission cycle. Once arrived the page number will be displayed.
- The teletext page can be made visible again by pressing the CANCEL  button (A8).
- It should be noted that the TV program cannot be changed while in cancel mode.



WATCHING TV WITH TELETEXT SUBTITLES

If the actual teletext page is a news flash or subtitle page, then most of the TV picture becomes visible. In this situation the ZOOM format chosen in TV mode is reactivated, where possible.

This is particularly useful while watching a program with the teletext subtitles. Only formats which do not allow the full height of the TV picture to be seen are not possible in teletext mode, as these would not allow all teletext lines to be displayed. Therefore only the formats ZOOM 14:9 AND ZOOM 16:9 (available with wide screen TV models) cannot be preserved with teletext subtitles. In this situation the default format FULL SCREEN (equal to 16:9) will be used.

For FAVOURITE format, FULL SCREEN will also be used only if the vertical size chosen is greater than 100%.

Note : A 16:9 or 14:9 format can be realised by keeping a 100% vertical size, but reducing the horizontal size, thus allowing teletext subtitles to be used over a picture that has no distortion.



TROUBLESHOOTING

SYMPTOMS

Neither picture nor sound:

- Is power cord plugged in?

INSPECT

Picture is OK, but no sound:

- Check if "Volume Down" is pressed.
- Check if the "Volume Control" is set to the minimum position.

Sound is OK, but no color:

- Check if the "Color Control" is set to the minimum position.
- Check if the program on air is in color, or in black and white.
- Check if the antenna installation and its connection are OK.

►Before Asking for Service:

Overlapped Picture Image:

- Check if the antenna direction is correct.
- Check if the "Frequency" function is set up correctly.

ACTION

- Press power button on the front of TV.
- If the red power light is on, press the remote control power button. Red power light should be green.

- Adjust the volume with "Volume Up" button.

- Check the antenna again.
- Check by turning on other channel programs.
- Refer to the color section again, and readjust the color.

- Direct the antenna toward the broadcasting station.
- Adjust the "Frequency" function.



SYMPTOMS

Picture has "Snow":

- Check if the antenna is damaged or its connection is all right.
- Check if there is an interference from car traffic or neon signs.

INSPECT

Stripes on picture:

- Check if there is an interference by other electronic devices, such as radio, telephone, etc.

Bad stereo sound:

- Long distance from the station or other radio waves could cause bad sound reception.

Operation disorder of Remote Control:

- Check if the batteries are low.
- Check "Remote Control Sensor" window.

HANDLING

- Correct the antenna faults or replace the connection cable.

- Keep magnetic or electronic devices away from the set.

- Shift the mode into "Mono" by using "MODE" button.

- Get rid of objects blocking the TV sensor and Remote Control
- Replace batteries or check if the electrodes are fitted properly in the compartment.



SPECIFICATION

TV Standard	Color system	PAL, NTSC 3.58/4.43(AV)
	Sound system	B/G, H, M(AV)
Rated voltage		AC 240V~, 50Hz
Power consumption	Power on	97W
	Stand-by	3W Under
Sound Output Power		7W X 7W(10% THD, 60% MOD. At 1kHz)
Channel Coverage	VHF	BAND I : CH0 - CH4 [CH0(46.25Mhz), CH2(64.25Mhz)] BAND II : CH5 - CH12 [CH7(182.25Mhz), CH10(196.25Mhz), CH10(209.25Mhz)] CABLE BAND : S1' - S3', S1 - S20 HYPER BAND : S21 - S41
	UHF	BAND IV, V : CH21 - CH69 [CH28(527.25Mhz)]
Tuning System		Frequency Synthesizer Tuning System
Channel Indication		On Screen Display
Program Selection		100 Programs
Aux. Terminal	Input	AV1 (Rear): RCA Jack AV2 (Front): RCA Jack, S-VHS(Front): S-Video
	Output	Monitor out (Rear): RCA Jack
Remote Control Unit.		RD-D110(Required two 1.5V batteries type with AAA size)
Dimension		840(W) x 512(H) x 499.5(D) mm
Picture tube		28" WIDE FLAT TYPE
Weight		39kg



NEC Australia Pty. Ltd.
ABN 86 001 217 527
Home Electronics Group

NEC Service Centres

PH: 131-632

NEW South Wales

Sydney	184 Milperra Rd, Revesby 2212	(02)9780 8688
Newcastle	120 Parry Street, Newcastle West 2302	(02)4926 2466

Victoria

Melbourne	Unit 1/6 Garden Road, Clayton 3168	(03)8562 6245
-----------	------------------------------------	---------------

Queensland

Brisbane	Unit 4/305 Montague Road, WEST END 4101	(07)3840 5858
Southport	Shop 1, 48 Ferry Road, Southport 4215	(07)5591 3670

South Adelaide

Adelaide	84A Richmond Rd, Keswick, 5053	(08)8375 5710
----------	--------------------------------	---------------

Western Australia

Perth	45 Sarich Court, Osborne Park 6017	(08)9445 5901
-------	------------------------------------	---------------

For Service in outer areas, please contact your NEC retailer for the address of the nearest Authorised NEC Service Centre.

NEC Australia Pty. Ltd.
Home Electronics Group
244 Beecroft Road EPPING 2121
Tel: 131 632
Fax: (02)9877 2353